

Abstract

A beam current density distribution in y direction of an ion beam 4 at a position of a forestage beam restricting shutter 32 is measured by measuring a change in a beam current of the ion beam 4 incident on a forestage multipoint Faraday 24 by passing an outer side of a side 34 of the shutter 32 while driving the forestage beam restricting shutter 32 in y direction by a forestage shutter driving apparatus 36. Further, a beam current density distribution in y direction of the ion beam 4 at a position of a poststage beam restricting shutter 42 is measured by measuring a change in the beam current of the ion beam 4 incident on a poststage multipoints Faraday 28 by passing an outer side of a side 44 of the shutter 42 while driving the poststage beam restricting shutter 42 in y direction by a poststage shutter driving apparatus 46. Further, at least one of an angle deviation, a diverging angle and a beam side in y direction of the ion beam 4 is measured by using a result of the measurement.